241 The basis of Rumanian economy is agriculture, in that some 80 per cent. of the population derive their livelihood from the land and agriculture provides a high proportion of the national income. [315] During recent years, however, the expansion of the oil industry has meant that agricultural pro- [439] duce has played a decreasing part in the country's exports, having been superseded by oil, exports of which amounted to 43 per cent. of the total export trade in 1938, compared with 19 per cent. in 1927; while grain exports in 1938 represented 23 per cent. compared with 46 per cent. in 1927.

In spite of the importance of agriculture to national prosperity farming methods are backward and per acre crop yields are among the lowest in Europe. Attention is particularly given to growing cereals, and of these maize is the chief, [231] providing a large surplus for export (apart from the war years). Livestock density is low, which is one of the weaknesses of Rumanian agriculture, the Banat being the only district in which numbers [439] are fairly high, and farming approaches the intensive system. It must be stressed that the relatively large export surplus, which consists of wheat, maize, barley, oilseeds and pulses, livestock, oilcake, etc., is only made possible by ●[146] the very low nutritional level which prevails, and that if this were raised to anything like western European standards exports would be commensurately reduced.

248 Since the war more attention has been paid to 249 the growth of industrial crops such as sunflower, soya, cotton, hemp and flax and the cultivation of rubber-bearing plants has been started following the finding of the *Kok Saghys* plant left by the Russians in Bessarabia. Though some success has been achieved in increasing the areas under textile fibres, and yields have been slightly higher, the hoped for increases in soya and sunflower cultivation have not been achieved due to unfavourable weather conditions and to general wartime dislocation.

313 Rumania's forest resources, though extensive, have suffered severely from a consistent policy of over-exploitation, and, while providing the basis of a fairly important industry during the period between the two wars, have been so depleted that cutting will have to be very restricted for a number of years if they are to be allowed to recover. The loss of Northern Transylvania has affected the timber industry in particular, as a high proportion of the forest resources were located there, and in that district this industry was better developed than elsewhere in the country.

IMPORTANCE OF OIL

315 Oil plays a major part, not only in Rumania's foreign trade, but also in covering her domestic fuel requirements, to a large extent replacing coal, reserves of which are small and of low quality. Since the war and the resulting pressure which Germany has exerted to obtain increased quantities of oil for her armies, (combined with the consistent drop in the rate of production between 1936 and 1941), serious attempts have been made to find alternative sources of fuel. The enormous reserves of natural gas existing in Transylvania, which were exploited only very slightly before the war, are being used increasingly as a source of fuel to supply local industries, and a

A. PRE-WAR CONDITIONS

1. General

241 Agriculture occupies about 80 per cent. of the population of Rumania and contributes the greater part of the national income: but, owing to the importance of the country's mineral-oil [439] production, exports of agricultural products accounted for rather less than half of total exports by value, in the immediate pre-war years.

Total agricultural production, even if there were no exports, would fall seriously short of the real food needs of the country. The poorest are actually ● [146] underfed, while the majority of the remainder subsist on a diet which, though adequate in quantity, is seriously deficient in quality and nutritional elements.

In her farming Rumania suffers from two inter-related difficulties: rural over-population and low [161] food output per acre. There are 16 agricultural workers per 100 acres of farm land, compared with 6 in Denmark and 3 in Britain. Another aspect of this is the extremely small size of most of the farms—75 per cent. of them are less than 5 hectares (12 acres) in extent. Because there is not enough land to go round, most farming families have to eke out a living on holdings which under any system of general farming would be too small to provide an adequate income.

The position would be less serious if a high per-acre food output were achieved. But in fact the Rumanian output per acre is barely one-quarter of that obtained in countries like Belgium and the Netherlands. Rumania pivots her farming on wheat and maize production but, owing to the extensive methods practised, the few livestock kept, and other reasons, per acre yields are among the lowest in Europe.

It is the over-population and land shortage which are largely responsible for agriculture remaining so backward. Having insufficient land the peasant does not produce much for sale, and so cannot afford to purchase fertilisers, good quality seed or better implements. Nor can he spare many acres for fodder crops, since the bulk of his land is needed to grow the food his family eats. And as he cannot buy fodder, he cannot keep many animals. Thus, while there is some scope for agricultural improvements which would ameliorate the peasants' lot, the pre-requisite of farming progress is to find alternative occupations for the surplus population.

423 The system of land tenure is peasant proprietor-
471 ship. This was attained under the Land Reform carried through after the first World War. The effect of this was to divide up and transfer to peasant ownership a large area of land formerly worked in big estates. This revolution in land tenure provided a solution for a long-standing social problem, but its effects on production were unfavourable. The large estates had been run by trained managers, with relatively advanced methods and equipment. Their transfer to ill-equipped, backward and uneducated peasants was followed, for a time at least, by a decline in yields, and consequently in total production and exports.

241 Little progress was made in the period between the two wars in remedying the disadvantages of uneconomic farm sizes, and in raising the low standards of farming. For lack of education the

241 however, be slightly deficient in grain, especially
133 in poor years.

[311] The hilly land of Transylvania and the Bucovina differs markedly from the plain. There is proportionately less arable and much more meadow, grazing and forest land. The soil is poor. Methods are not as primitive as in the plain land of the Old Kingdom, but over-crowding is more serious and output per head is consequently lower. Parts of this region are slightly deficient in grain. Though [146] the level of food consumption is low, the dietary is more varied than elsewhere in the country, less maize and more meat and dairy produce being eaten.

3. Crops

311 Of the total area of pre-war Rumania, of nearly 30 million hectares (110,000 sq. miles) and twice the area of England and Wales, about 13 million hectares, or 45 per cent. was arable. Permanent meadow, pasture and grazing occupied 14 per cent., while tree and bush crops accounted for a further 2 per cent. The remaining land was non-agricultural, forest and waste land.

243 A very high proportion of the arable—over 80 per cent.—was used for grain growing, principally maize, wheat and barley. Owing to low rainfall, use of poor seed and lack of fertilisers, yields were at a low level and fluctuated widely from year to year.

[439] Out of an average grain production of 11 million tons, 6 millions went into domestic human consumption and 1½ million were exported, the remainder going to fodder, seed and waste. Grain exports have always figured largely in the country's foreign trade. During the twenty years 1920 to 1939 they only once fell below a million tons, and in some years exceeded three million tons. In value, during the decade before the war, they formed, after petroleum products, the main item in exports.

241 No other category of crops compares with grain. Sown fodder crops took barely 5 per cent. of the arable, all other crops, including potatoes, fibres, oilseeds, tobacco and sugar beet, about 8 per cent. Peas, beans and oilseeds were grown in sufficient quantities to provide surpluses for export. Germany established two companies—Solagra in 1934 and Sova A.G. in 1940—which invested large sums in promoting oilseed cultivation. The area 177 under sunflower was raised only slightly, but that under soya rose from nil in 1933 to 103,000 ha. (254,000 acres) in 1939, but the greater part of both crops was located in Bessarabia which Rumania lost to the U.S.S.R. in 1940 (see below).

244 Production of potatoes, vegetables and sugar
247 beet was just sufficient for domestic consumption, but the tobacco crop did not quite meet requirements. Tobacco production had fallen from 20,000 tons in the late nineteen-twenties to 12,000 tons in the years just prior to the war.

[7a]

241 654 Alongside this organisation the State ran certain technical services for agriculture, distribution of tested seeds, control of weights and measures, provision of bull and stallion services from its own stud farms. This work, however, remained less developed than in other S.E. European countries.

8. Agricultural Exports

241 231 439 Rumania was the largest grain exporter in Europe. By value, grain accounted for over half the total of agricultural exports. Livestock products, mainly live pigs and cattle, amounted to approximately one-fifth of the total, the remainder consisting of peas, beans, oilseeds, oil and oilcake, eggs and small quantities of fruit. Quantities exported on the average in the years 1935 to 1938 are shown below :—

*Exports of Principal Agricultural Commodities**

	Average 1935-38 ('000 *metric tons*)
Wheat	686
Maize	543
Barley	297
Peas	21
Beans	43
Oilseeds .. .	108
Vegetable oils ..	5
Oilcake	103
Cattle ('000 head) ..	48
Pigs ('000 head) ..	222
Eggs	10

* Pre-1940 frontiers

241 439 It is of interest to note that, despite German hopes of a development in oilseed cultivation and exports, no increase had been achieved up to the eve of the war. German interest had succeeded in stimulating production and exports of soya beans, but there was no expansion in total oilseed exports owing to a decline in rape seed and to an increase in domestic consumption of oil.

German purchases of Rumanian agricultural exports were increasing in recent pre-war years. In 1939 the territories of Greater Germany took 25 per cent. of the wheat exports, half the feed grain and the bulk of the oilseeds. Italy also took appreciable quantities of grain.

9. Food Consumption

146 962 The Rumanian diet is perhaps the worst-balanced in south-east Europe. The outstanding feature is its high dependence on grain, which provides three-quarters of the calories and 70 per cent. of the protein. In the towns white wheat bread is eaten except by the very poor, whilst in the country wholemeal bread or maize is usual. Over large areas, particularly in the Old Kingdom, maize forms the chief food. (Taking the country as a whole maize consumption is two-thirds higher than wheat.) During the summer months, when work is very heavy, peasant families may eat as much as 3 kg. (6½ lb.) a head daily, almost always in the form of ***mămăligă*** (a kind of porridge).

The rest of the rural dietary consists chiefly of beans, some potatoes (especially in Transylvania), cabbage, beetroots, carrots, onions and a certain amount of cheese and milk. Consumption of all these foods is much too low by nutritional standards. Meat is rarely eaten, except at Christmas time when a pig is killed—for the rest of the year small amounts of fat salted pork are used, more or less as a flavouring. Some fish is eaten in villages near rivers. Vegetable oils—mainly sunflower—and pig fats are used for cooking; butter is rarely eaten.

146 262 Largely because of its cost, the consumption of sugar is very low, except among the well-to-do in the towns. (To encourage sugar-beet growing, a high price was set by the Government.)

[785] The diet is further impoverished by the long religious fasts—seven weeks before Easter, six weeks before Christmas, two shorter summer periods, plus Wednesdays and Fridays of each week. The diet during the fast includes practically no food of animal origin. Children under 10 years do not normally observe these fasts and, in fact, usually have a better diet during these periods since more milk, eggs and butter are available for them.

The diet, though fairly adequate in energy value, is short of animal protein, fats and calcium; moreover, where maize is the principal cereal lack of vitamin B_2 may be very serious. Various symptoms of vitamin and mineral deficiencies are [165] observed, and the high infant-mortality rate—the highest in Europe—is also partly due to malnutrition. One of the most serious effects of the poor diet is the nervous disease pellagra, caused by this deficiency of the vitamin B_2 factor. In Moldavia, where maize is the staple food, about 5 per cent. [164] of the rural population suffers from pellagra every spring. In the whole country about 3,000 deaths occur each year from this disease (compared with 4,000 in the maize-eating southern states of U.S.A.).

The average annual pre-war food consumption of Rumania is shown in the following table, with comparative figures for the United Kingdom.

Average per Head Consumption

	Rumania		*United Kingdom*	
	Kg.	*Lb.*	*Kg.*	*Lb.*
Wheat and rye	104	229	129	285
Maize	166	365	—	—
Potatoes	50	110	84	185
Sugar	5	11	43	95
Meat	17	37	63	139
Milk	70	123*	94	165*
Butter	1	2	11	24
Pig fat	4	10	5	11
Vegetable oil	1·5	3	—	—
Margarine	—	—	4	10
Calories per day	2,700		3,100	

*Pints

B. WAR-TIME CHANGES

1. Territorial Changes

728 241 311 The net effect of the territorial changes which have occurred since 1939 is the loss of Northern Transylvania to Hungary and of Southern Dobruja to Bulgaria. For two seasons' crops, 1940 and 1941, Rumania was without Bessarabia, but in the late summer of 1941 she not only regained Bessarabia but acquired administrative control of the Soviet territory now styled Transnistria, and this has made small contributions to the food supplies of Rumania in 1942-43. Ignoring Transnistria, however, Rumania lost 12 per cent. of her former arable area and grain production. The Transylvanian areas ceded to Hungary, though not rich agriculturally, probably needed only small imports of grain to supplement their own production, while south Dobruja, though a surplus producing area contributed only a fraction to Rumania's total agricultural production. The country's potential agricultural export remains, therefore, substantially what it was before the war.

241 722 ### 2. Agriculture in War Years

Germany, at the outbreak of the war, looked to the Danube countries, and to Rumania in particu-

[9a]